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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,254	03/29/2001	Frank T. Brown	5038-73	6340

7590 03/27/2003

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EXAMINER

KOVALICK, VINCENT E

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 03/27/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

5/

Office Action Summary

Application No.

09/823,254

Applicant(s)

BROWN ET AL.

Examiner

Vincent E Kovalick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13, 19-26 and 29-34 is/are rejected.
- 7) ☒ Claim(s) 11, 14-18, 27 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Applicant's Patent Application, Serial No. 09/823,254, with a File Date of March 29, 2001.

Claim Objections

2. Claim 29 is objected to because of the following informalities: the term "mo" in line 3 of claim 29 is assumed to be a typographical error that should be replaced with the word ---no---. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. Claims 1-5, 19-21, 25-26 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin (USP 6,337,681).

Relative to claims 1, 19, 25, and 29-30, Martin **teaches** an interactive display system for projecting user drawn script in combination with screen output of application programs onto a touch sensitive display surface which is capable of providing user interaction with the applications programs (col. 1, lines 32-41 and col. 2, lines 6-42 and col. 3, lines 38-67); Martin further **teaches** a drawing tablet comprising; a surface; and an imaging sensor designed to capture an image on the surface, the imaging sensor designed to capture the image even if the image is occluded; transmit the captured image to a computer and process the captured image on the computer for display on a monitor (col. 1, lines 32-41; col. 2, lines 33-37 and col. 3, lines 38-67).

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The difference between the teaching of Martin and that of the instant invention is that Martin teaches a touch sensitive display as opposed to a drawing tablet as taught by the instant invention.

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the teachings of Martin satisfy the limitations as called out in claims 1, 19, 25 and 29-30 of the instant invention.

Regarding claims 2, 20 and 31, Martin further **teaches** said drawing table wherein the surface is translucent; and the imaging sensor is mounted below the surface (col. 1, lines 32-41; col. 3, lines 57-67 and Abstract).

Relative to claim 3, Martin further **teaches** a drawing tablet according to claim 2, the drawing tablet further comprising transmission means designed to transmit the image captured by the imaging sensor to a computer (col. 3, lines 30-43 and 57-62)

Relative to claims 4, 5 and 21 Martin **teaches** said drawing table wherein the transmission means includes a cable coupled to the drawing tablet and to the computer (col. 3, lines 38-42 and Fig. 1 where a cable connects the touch sensitive screen (item 1) to the touch screen controller (item 3) which inserts into the computer (item 5)). It would have been obvious to a person of ordinary skill in the art at the time of the invention that a common practice of transmitting data is by wireless transmission means that could be applied in this case.

Relative to claim 26, it would have been obvious to a person of ordinary skill in the art at the time of the invention that with the means to capture the image from the surface of the drawing means, updates to the image would be incorporated in the same manner by erasing from or adding to the image on the surface of the drawing means.

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Regarding claims 32 and 33, it would have been obvious to a person of ordinary skill in the art at the time of the invention that instructions stored in the storage medium that directs the processing or the received images would be such that any modifications to the received image would be based on the contents of the image or based on a change form a prior image as directed by the said program instruction.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claim 2 in item 3 hereinabove, and further in view of Inuzuka et al. (USP 5,812,274).

Relative to claim 6, Martin **does not teach** a drawing tablet further comprising software in a computer designed to adjust the image to compensate for distortion by the imaging sensor.

Inuzuka et al. **teaches** an image signal processing apparatus (col. 2, lines 13-39); Inuzuka et al. further **teaches** software in a computer designed to adjust the image to compensate for distortion by the imaging sensor (col. 1, lines 17-25).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate in the device as taught by Martin the feature as taught by Inuzuka et al. in order to produce a uniform image signal.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claim 2 in item 3 hereinabove, and further in view of Hirasawa et al. (USP 6,456,319).

Regarding claim 7, Martin **does not teach** the drawing tablet further comprising software in a computer designed to adjust the image to compensate for a reversed image captured by the imaging sensor.

Hirasawa et al. **teaches** an image sensing apparatus (col. 3, lines 49-67; col. 4, lines 1-67; col. 5, lines 1-67 and col. 6, lines 1-67); Hirasawa et al. further **teaches** a signal processor

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to adjust the image to compensate for a reversed image captured by the imaging sensor (col. 8, lines 48-55).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate in the device as taught by Martin the feature as taught by Hirasawa et al. in order to convert a image from a negative mode to a positive mode to enable the presentation of a positive image.

6. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claim 2 in item 3 hereinabove, and further in view of Yamaguchi (USP 6,441,807).

Relative to claim 8-10, Martin **does not teach** a drawing tablet comprising: an erasable pen designed to draw on the surface; an eraser for erasing marks produced by the erasable pen; or wherein the image is hand-drawn with the erasable pen.

Yamaguchi **teaches** a display system which transfers information, written onto an information input surface of a sheet member with a marker pen (col. 3, lines 17-67; col. 4, lines 1-67 and col. 5, lines 1-37; Yamaguchi further **teaches** an input information surface comprising: an erasable pen designed to draw on the surface (col. 1, lines 24-38); an eraser for erasing marks produced by the erasable pen (col. 1, lines 29-30); and an image is hand-drawn with the erasable pen (col. 1, lines 29-38).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate in the device as taught by Martin the feature as taught by Yamaguchi in order to expand the features of the system to include a pen to accommodate writing/drawing and erasing on the input surface.

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7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claim 2 in item 3 hereinabove, and further in view of Filo (USP 5,604,517).

Regarding claim 12. Martin **does not teach** a drawing tablet wherein the imaging sensor is designed to capture colors in the image on the surface.

Filo **teaches** an electronic drawing device (col. 2, lines 14-67 and col. 3, lines 1-4); Filo further **teaches** a drawing device wherein the imaging sensor is designed to capture colors in the image on the surface (col. 2, lines 38-49).

It would have been obvious to a person of ordinary skill in the art at the time of the inventions to incorporate in the device as taught by Martin the feature as taught by Filo in order to provide the benefit of producing a colored image the could differentiate various aspects of the image for viewing by system users.

8. Claims 13, 22-24 and 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Martin as applied to claims 2, 20 and 33 respectively in item 3 hereinabove, and further in view of Lovell et al. (USP 4,952,051).

Relative to claims 13, 22-24 and 34 Martin **does not teach** a drawing tablet further comprising software in a computer designed to animate at least a portion of the image.

Lovell et al. **teaches** an apparatus and method for producing animated drawings (col. 3, lines 33-67; col. 4, lines 1-67; col. 5, lines 1-67 and col. 6, lines 1-6); Lovelle et al. further **teaches** a drawing tablet comprising software in a computer designed to animate at least a portion of the image (col. 25, lines 30-68; col. 26, lines 1-23; Abstract and Fig. 11).

It would have been obvious to a person of ordinary skill in the art at the time of the inventions to incorporate in the device as taught by Martin the feature as taught by Lovell et al. in order to

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add the feature of enabling the animation of portions of the image as it is presented to the drawing input surface; or animation based on the contents of, or changes to the contents of the captured image.

Allowable Subject Matter

9. Claims 11, 14-18 and 27-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Relative to claim 11, the major difference between the teachings of the prior art of record (USP 6,337,681, Martin; USP 6,441,807, Yamaguchi and USP 4,952,051, Lovell et al.) and that of the instant invention is that said prior art of record **does not teach** a drawing tablet wherein the imaging sensor is designed to capture images of physical objects placed on the surface.

Relative to claim 14, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a drawing tablet wherein the software is designed to animate the portion of the image based on a movement of a physical object placed on the surface.

Relative to claim 15, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a drawing tablet comprising light projecting means.

Relative to claim 18, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a drawing tablet further comprising an additional light source to increase contrast of the image on the surface as captured by the imaging sensor.

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Relative to claim 27, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a drawing tablet further comprising projecting a light onto the drawing tablet.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

U. S. Patent No.	6,448,544	Stanton et al.
U. S. Patent No.	5,548,417	Sekimoto et al.
U. S. Patent No.	4,232,358	Nichols

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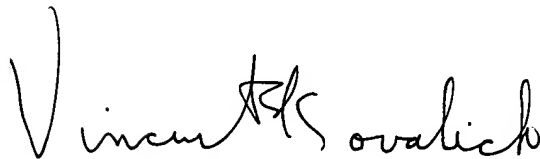
Response

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E Kovalick whose telephone number is 703 306-3020.

The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703 305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9314 for regular communications and 703 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306-0377.

A handwritten signature in black ink that reads "Vincent E. Kovalick". The signature is written in a cursive style with a large initial "V" and a stylized "K".

Vincent E. Kovalick
March 19, 2003